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## The value of radiological methods in diagnosis of dysmenorrhea of puberty

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### Abstract

The scientific article "The Value of Radiological Methods in Diagnosis of Dysmenorrhea of Puberty" presents the results of studies using non-invasive diagnostic technologies: magnetic resonance imaging and three-dimensional ultrasonography with color Doppler blood flow imaging (CDI). The evaluation of the features of radiological indices in the patients with dysmenorrhea of functional and organic genesis of severe degree based on the study of the results of 3D ultrasound examination, MRI of small pelvic organs, as well as the state of uterine and endomyometrial blood flow to improve the algorithm of diagnostics has been carried out. A high percentage (51,11%) of the rate of detection of organic pathology in the patients with severe dysmenorrhea (anomalies of the uterus development in the form of bicornuate, saddle, septal, horned, leiomyoma of the uterus body, various forms of endometriosis, combination of leiomyoma and endometriosis of womb) has been stated. Revealed hemodynamic abnormality in the basins of the uterine arteries, the low degree of arterial vascularization of subendomyometrial layer and endometrium, high vascular resistance and rate reduction in blood flow were detected, which is more evident in the patients with functional dysmenorrhea. On the basis of comparative evaluation of informativeness of the research methods, expedience of their use has been substantiated.

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### Keywords

Dysmenorrhea, Puberty, Radiation methods